



CITY OF **NEWARK**  
Mayor Ras J. Baraka

## City of Newark Department of Water and Sewer Utilities

### 2020 (2019 Data) Water Quality Report

**PWS ID 0714001**

Dear Fellow Newark Resident,



I am pleased to present the Water Quality Report to residents within the Pequannock water system.

The City's Lead Service Line Replacement (LSLR) program, which will replace 100% of the 18,000+ lead service lines at no cost to you, is well underway with more than 12,000 replaced. Additionally, the City has installed an Orthophosphate corrosion-control treatment with the approval from NJDEP to protect the service lines from lead, as the levels continue to decrease. During this time, the City has distributed more than 40,000 filters with cartridges and water

bottles to the impacted users at no charge. We anticipate to have completed the LSLR program by the end of 2021.

Additionally, the City has initiated several water distribution/treatment system upgrades to improve the quality of your water.

Customers are encouraged to visit [www.newarkleadserviceline.com](http://www.newarkleadserviceline.com) for pertinent information regarding lead sources, health impacts, the steps to take to reduce the impact of lead, and the efforts put forward by the City of Newark to combat lead exceedance and inspire public participation.

Please know that we are committed to serving our community.

Sincerely,

Ras J. Baraka, Mayor

This report contains important information about our drinking water. If you do not understand, please have someone explain it for you.

Este informe contiene información muy importante sobre su agua beber. Tradúzcalo o hable con alguien que lo entienda bien.

Este reporte contém informações importantes sobre a sua água de beber. Traduza-o ou fale com alguém que o compreenda.

## OUR PLEDGE

Newark is committed to providing a reliable supply of safe, quality drinking water to more than 500,000 people in 10 communities. We also pledge to meet and exceed safe drinking water quality standards as members of the Partnership for Safe Water Program. The Partnership is a voluntary cooperative effort between the EPA, drinking water professional organizations, and more than 200 drinking water utilities across the country. All water utilities that join the Partnership agree to adopt stringent performance standards to protect the water supply against microbiological contamination. Each year we provide this report on the quality of the water delivered by the City of Newark. This report meets the Federal Safe Drinking Water Act (SDWA) requirement for "Consumer Confidence Reports" and contains information on the source of our water, its constituents, and the health risks associated with any contaminants.

The City of Newark has a water treatment plant where it treats and filters our water to ensure its safety and portability. Newark routinely monitors and tests the water at rivers, lakes and streams that supply its reservoirs. Newark continually monitors the quality of water throughout the distribution system, which finds its way to you, the consumer.



## SOURCE WATER

Newark withdraws water from the Pequannock Watershed in West Milford, New Jersey and treats it at the Pequannock Water Treatment Plant. Water quality monitoring stations are operated by the U.S. Geological Survey upstream of the Pequannock WTP intake, in West Milford, and at the Charlotteburg Reservoir. These monitoring stations provide continuous data for important water quality parameters, and help provide advanced warning of adverse changes in water quality.

Newark can also receive water from North Jersey District Water Supply Commission (NJDWSC). NJDWSC treats surface water from the Wanaque Reservoir at the Wanaque Water Treatment Plant.

Inter connections exist with other towns or cities throughout the system. These include townships of Belleville, Bloomfield, East Orange, Pequannock, Nutley and Elizabeth.

## SOURCE WATER ASSESSMENT

NJDEP has prepared Source Water Assessment reports and summaries for all public water systems. The Source Water Assessment for the Newark system (PWS ID 0714001) and NJDWSC system (PWS ID 1613001) can be obtained by accessing NJDEP's source water assessment web site at <http://www.nj.gov/dep/watersupply/swap/index.html>, or by contacting the NJDEP, Bureau of Safe Drinking Water at 609-292-5550 or [watersupply@dep.nj.gov](mailto:watersupply@dep.nj.gov). If a system is rated highly susceptible for a contamination category, it does not mean a customer is – or will be – consuming contaminated water. The rating reflects the potential for contamination of a source water, not the existence of contamination. Public water systems are required to monitor for regulated contaminants and to install treatment if any of those contaminants are detected at frequencies and concentrations above allowable levels. The source water assessments performed on the intakes for each system lists the susceptibility ratings for a variety of contaminants that may be present in source waters as seen in the tables below.

Surface Water Intakes	Pathogens	Nutrients	Pesticides	Volatile Organic Compounds
Newark	High	Low	Low	Low
NJDWSC (5)	High (5)	High (5)	Medium (2) Low (3)	Medium (5)

Surface Water Intakes	Inorganic Contaminants	Radionuclides	Radon	Disinfection Byproduct Precursors
Newark	High	Low	Low	High
NJDWSC (5)	High (5)	Low (5)	Low (5)	High (5)

## WHAT TO EXPECT FROM YOUR WATER



The sources of drinking water (both tap and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. To ensure that tap water is safe to drink, the EPA prescribes regulations that limit the amount of certain substances in water provided by public water

systems. The Safe Drinking Water Act regulations allow monitoring waivers to reduce or eliminate the monitoring requirements for Asbestos, Volatile Organic Chemicals and Synthetic Organic Materials.

## SUBSTANCES THAT COULD BE IN WATER

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (1-800-426-4791). Substances that may be present in source water include:

Microbial Contaminants – such as viruses and bacteria, may come from sewage treatment plants, septic systems, agricultural livestock operations, or wildlife;

- Inorganic Contaminants – such as salts and metals, can be naturally occurring or may result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming;
- Pesticides and Herbicides – may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses;
- Organic Chemical Contaminants – including synthetic and volatile organic chemicals, are by-products of industrial processes and petroleum production and may also come from gas stations, urban stormwater runoff, and septic systems;
- Radioactive Contaminants - can be naturally occurring or may be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulates and establishes limits for contaminants in bottled water.

## CHLORINE TREATS OUR WATER

For almost 100 years, water suppliers in America and other countries have used chlorine to treat or disinfect drinking water. According to the EPA and other health agencies, chlorine is currently one of the most effective disinfectants used to kill harmful microorganisms. Disinfection of all public water supplies is required by federal and state laws and regulations, including the Safe Drinking Water Act and the Surface Water Treatment Rule. Water supplied by the City of Newark meets the Chlorine Contact Time (CT) requirements for inactivation of Giardia. Water is chlorinated before and after treatment and further chlorinated at Montclair chlorination station before entering the water.

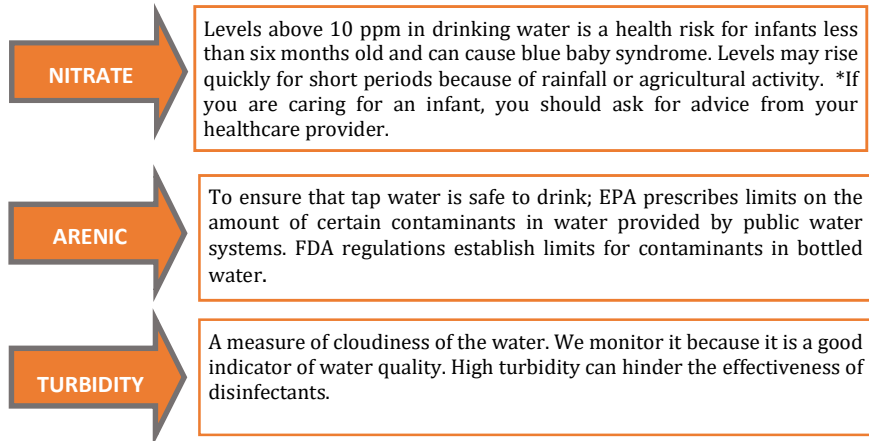
## TESTING AND TREATMENT

Newark takes multiple steps in our testing and treatment processes to ensure the water we deliver to your home is safe to drink and meets the contaminant level standards. Your water goes through a thorough treatment process which includes removing small debris, filtering, and disinfecting. In addition, Newark regularly collects and tests approximately 300 water samples a day to ensure that the water our customers receive meets and exceeds federal and state drinking water quality standards. Our commitment to providing you, our customers, with quality drinking water is proven through the comprehensive testing and treatment processes we employ. The table of detected contaminants is shown below:



## ITEMS OF SPECIAL INTEREST TO NEWARKERS

Lakes, rivers, and reservoirs may contain *Cryptosporidium*, which is a microscopic parasite that can cause respiratory and gastrointestinal illness in people. It is found in human feces and many domestic and wild animals. We test for *Cryptosporidium* on a monthly basis in our Pequannock finished water surface water supplies. It has never been detected in a viable state in any of our treated water supplies nor has it been found in the Wanaque Supply



## LEAD



In the first and second half of 2017, 2018 and 2019, Newark reported lead exceedances. Nevertheless, Newark remains committed to providing clean, safe and reliable drinking water. Although, in 2019, the City received a reporting violation for failure to include the mandatory lead language in the water bill for the 2<sup>nd</sup> quarter, the residents were notified via other public education materials regarding the exceedance.

To address the lead levels, the City has implemented both immediate and long-term measures to minimize lead levels throughout the system. The City has undertaken the following steps:

The City is conducting a Lead Service Line Replacement (LSLR) Program to complete within thirty (30) months with 100% replacement of lead service lines in the City of Newark at no cost to the homeowners. The City will continue to implement its Lead Service Line Replacement Program regardless of whether or not it exceeds the lead action level.

The City has also distributed over 40,000 lead safe water filters and over 35,000 replacement cartridges boxes to the impacted residents free-of-charge. Additionally, the City of Newark has evaluated our existing corrosion control treatment in both the Pequannock and Wanaque service areas by conducting a desktop study. Consequently, Corrosion Control Treatment Study recommendations were submitted to the NJDEP and were approved by the State.

The City of Newark with the approval of the state has installed a temporary Zinc Orthophosphate injection system for the corrosion control treatment at Valley Road Re-Chlorination Station that started working on May 7, 2019. Currently the City of Newark is in the process of operating and submitting progress reports to NJDEP on a quarterly basis starting from August 1, 2019. The progress reports provide a determination of the

effectiveness of zinc orthophosphate in the City's water distribution system. Sequential sampling of the water after the injection of zinc orthophosphate commenced in July 2019.

## LEAD - CONTINUED

Sequential sampling is the process of collecting a series of samples in a row at an interior tap to evaluate the water quality from the various portions of the plumbing and service line to the water main in the street. As anticipated, data indicates that the orthophosphate addition is reducing lead levels in the distribution system after approximately six (6) months of treatment. Reduced lead levels were observed in sequential sampling performed in October, November and December of 2019. The City strongly encourages residents to run their water including showering, flushing toilets and washing dishes in order to help coat the pipes and allow the new corrosion control treatment to optimize. The City will take the best course of action as soon as the City receives additional testing results. The City is working closely with the Governor's office, the U.S. Environmental Protection Agency, the New Jersey Department of Environmental Protection and the water filter manufacturer.

*"If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. City of Newark is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components.*

*When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>."*

If you are concerned about lead in your water, you may wish to have your water tested. If you suspect that your home has a lead service line, contact the Department of Water & Sewer Utilities by phone at (973) 733-4311 or by email at [waterandsewer@ci.newark.nj.us](mailto:waterandsewer@ci.newark.nj.us). We will inspect and assess your water at no cost to you. Infants and children who drink water-containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure. Information on lead in drinking water, testing methods and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline, (800) 426-4791, or at <http://www.epa.gov/safewater/lead>. Also please visit [www.leadserviceline.com](http://www.leadserviceline.com) to get all pertinent information regarding lead sources, health impacts, the steps to be taken to reduce the impact of lead, the efforts put forward by the City of Newark in combating with lead exceedance.

*Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).*



We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards.

Regarding SOC (synthetic Organic Carbon), NJDEP issued SOC waivers to many systems for the current 3-year compliance period (2017-2019). Our water system received a SOC waiver from the NJDEP.

## WATER QUALITY TABLES

The tables on pages 4, 5, and the following page list all the drinking water analyses that were detected during calendar year 2019. The presence of these analyses in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in these tables is from January 1 through December 31, 2019. The state requires us to monitor the water for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year.

Radiological Contaminants	City of Newark	NJDWS C	Federal/State MCL	MCL Meets Standard?	MCL G	Typical Source of Contaminant
Combined Radium (pCi/L)-2017	1.5	N/A	5	Yes	0	Erosion of natural deposits.

Lead and Copper	City of Newark		Federal/State MCL	MCL Meets Standard ?	MCL G	Typical Source of Contaminant
	(90th percentile)					
	Jan-Jun 348Samples	Jul-Dec 495 Samples				
Lead (ppb) 2019	57 162 sites above action level	31 44 sites above action level	AL=15	No	15	Corrosion of household plumbing; Erosion of natural deposits; and, Leaching from wood preservatives.
	NJDWSC					
	(90th percentile)					
	Jun-Sept. 5 Samples					
	2.9					
Copper (ppb) 2019	City of Newark		AL=1300	Yes	1300	Corrosion of household plumbing; Erosion of natural deposits; and, Leaching from wood preservatives .
	(90th percentile)					
	Jan-Jun 100Samples	Jul-Dec 100Samples				
	205	148				
	NJDWSC					
	(90th percentile)					
	Jun-Sept. 5 Samples					
	69					

Turbidity	City of Newark		Federal/State MCL	MCL Meets Standard?	MCLG	Typical Source of Contaminant
	Min 0.01	Max 0.4				
Turbidity (NTU and Combined Filtered Water)	.40 – highest single measurement		TT= 1 NTU	Yes	N/A	Soil run-off
	99.9 % lowest monthly- percent of samples <0.3 NTU		95%- percentage of samples <0.3 NTU	No		
	.14– Average					
	NJDWSC		Federal/State MCL			
	1 – highest single 2.1		TT= 1 NTU			
	98.6% - lowest monthly percent of samples <0.3 NTU		95%- percentage of samples <0.3 NTU			
	0.09- Average			Yes		

Total Organic Carbon	City of Newark	NJDWSC	Federal/State MCL	MCL Meets Standard?	MCLG	Typical Source of Contaminant
TOC (ppm)	N/A	Running Average = 1.1 Removal Ratio 1.0-1.3	TT= Meeting alternative criteria removal ratio of 1.0	Yes	N/A	Naturally present in environment

## TTHM / HAA5

The Newark water system violated the drinking water standard for TTHMs and HAA5 in 2019. Although this incident was not an emergency you have a right to know what happened and what we did (are doing) to correct this situation. We routinely monitor for the presence of drinking water contaminants. Testing results from 1/1/19 to 12/31/19 show that our system exceeded the standard or maximum contaminant level (MCL), for HAA5 at several sample locations during and TTHMs at three of twelve sample locations during the first and second quarter of 2019.

The standard for HAA5 is 60 micrograms per liter (µg/L). It is determined by averaging all the samples collected at each sampling location for the past 12 months (a locational running annual average (LRAA)). The HAA5 LRAA for the nine locations are as shown.

The standard for TTHMs is 80 micrograms per liter (µg/L). It is determined by averaging all the samples collected at each sampling location for the past 12 months (a locational running annual average (LRAA)). The TTHM LRAA for the nine locations are shown.

It should be noted that the City of Newark inadvertently left out its non-compliance for HAA5s in last year's CCR but the City specifically did notify its customers through individual mailings, distribution and posting of notices in public buildings throughout the City of Newark as is required regulatory for the period 7/1/18- 9/30/18 and 10/1/18 - 12/31/18. City representatives also answered customer inquiries in town hall meetings and on the telephone.

Testing results from 7/1/18 to 9/30/18 showed that our system exceeded the standard, or maximum contaminant level (MCL), for HAA5. The LRAA standard for HAA5 is 60 micrograms per liter (ug/L). The LRAA for that period for eight of our 12 sampling locations were as follows

Site #2 = 74 ug/L; Site #3 = 77 ug/L; Site #5 = 76 ug/L; Site #7 = 62 ug/L; Site #9 = 74 ug/L; Site #10 = 70 ug/L; Stage 1 #203 = 81 ug/L; Stage 1 #201 = 83 ug/L.

Testing results for the period 10/1/18 to 12/31/18 showed that our system exceeded the standard, or maximum contaminant level (MCL), for HAA5 at nine of twelve sample locations. The standard for HAA5 is 60 micrograms per liter (ug/L). The LRAA for those nine locations were as follows:

Site #1 = 62 ug/L, Site #2 = 76 ug/L, Site #3 = 80 ug/L, Site #5 = 78 ug/L, Site #7 = 68 ug/L, Site #9 = 81 ug/L, Site #10 = 74 ug/L, Site #11 = 82 ug/L, Site #12 = 79 ug/L.

**What should I do?** There is nothing you need to do. You do not need to boil your water or take other corrective actions. If a situation arises where the water is no longer safe to drink, you will be notified within 24 hours.

If you have a severely compromised immune system, have an infant, are pregnant, or are elderly, you may be at increased risk and should seek advice from your health care providers about drinking this water.

**What does this mean?** This is not an emergency. If it had been an emergency, you would have been notified within 24 hours. HAA5 are five haloacetic acid compounds, which form when disinfectants react with natural organic matter in the water.

*"Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer"*

**What is being done?** The City obtained state approvals for new treatment processes to minimize the formation of HAA5 compounds while ensuring we maintain an adequate level of disinfectant. We have taken additional steps to reduce natural organic matter to enable reduced disinfectant levels, and increased flushing of water lines and investigative sampling to determine if our efforts have been effective.

We have modified treatment and have gotten TTHMs below the MCL and have already seen reductions in HAA5 with many sampling locations being below 60 micrograms per liter. We anticipate resolving the problem and having the LRAA under the MCL early 2020.

In addition, this notice serves to convey that our water system was required to take any action necessary to bring the water system into compliance with applicable MCL(s) within one-year from the initial violation, the 3<sup>rd</sup> quarter of 2018. While the Newark Water Department has acted, made changes to its treatment process on 7/9/19 and brought levels down; however, it did not bring down the level for LRAA within the one year ending October 18, 2019.

Secondary Compounds	City of Newark	NJDWSC	Unit Measure	Federal/State Secondary Standards (optimal)	Source of Contamination
Alkylbenzene Sulfonate and Linear Alkylbenzene Sulfonate	N/A	<0.05	ppm	500	Naturally present in environment
Alkalinity	26.9	40	ppm	NS	A characteristic of water caused by carbonate and bicarbonates
Aluminum 2017	0.083	0.028	ppm	≤0.200	By-product of water treatment using aluminum salts
Chloride	36.5	44	ppm	≤250	Erosion of natural deposits
Color	2	2	CU	≤10	Presence of manganese and iron, plankton, humus, peat and weeds
Copper	< 5	13	ppb	≤1000	Corrosion of household plumbing systems; erosion of natural deposits
Hardness	45.7	43	ppm	50-250	Caused primarily by salts of calcium and magnesium
Iron	0.0962	0.017	ppm	0.3	Erosion of natural deposits
Manganese	0.039	0.018	ppm	≤0.05	
Odor	1	<1.0	TON	≤3	Algae and plant matter
pH	7.28	8.09	units	6.5-8.5	Presence of carbonate, bicarbonates and carbon dioxide
Sodium	29.2	23.4	ppm	≤50	Runoff from road salt and some water softening process
Sulfate	10.3	5.97	ppm	≤250	Erosion of natural deposits
Total Dissolved Solids	105	118	ppm	≤500	
Zinc	<0.2	0.01	ppm	≤5	Erosion of natural deposits, pipe corrosion and/or runoff

Inorganic Contaminants	City of Newark	NJDWSC	Federal/State MCL	MCL Meets Standard?	MCLG	Typical Source of Contaminant
Nitrate (ppm as Nitrogen)	0.111	N/A	10.0/10.0	Yes	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; and, Erosion of natural deposits.

In 2018 we had a Cyanide reporting violation that was not reported in the 2019 CCR. The Cyanide analytical result was non-detectable (<.0022 mg/L) and is provided in this year's report for informational purposes. Although, the laboratory took and analyzed the sample in the proper time frame, it was not reported to Newark timely and therefore was not included in the 2019 CCR. Additionally, in 2018, the City exceeded its combined filter effluent (CFE) turbidity limit of 0.3 NTU in over 5 % of its samples for the month of December 2018. This was inadvertently left out of last year's CCR and is presented here for your information. Newark water customers, however, were notified as per regulations by direct mail and postings in public buildings throughout the City.

Micro-biological	City of Newark 2055samples		NJDWSC	Federal/State MCL	MCL Meets Standard?	MCLG
Total Coliform	0		0	Testing Positive < 5% per month	Yes	0
Volatile Organic Compounds	City of Newark		Federal/State MCL	MCL Meets Standard?	Typical Source of Contaminant	
VOC's (ppb)	ND		Dependent on specific VOC	Yes	Industrial factory discharge. They include benzene, toluene and naphthalene.	
Regulated Disinfectants	City of Newark		NJDWSC	MRDL	MRDLG	Source of Contamination
	Min	Max				
	0.05	2.19				
Distribution System Chlorine, ppm	0.624		0.8	4	4	Water Additive used to control microbes
Source (Raw) Water Pathogen Monitoring	City of Newark		NJDWSC	Source of Contamination		
	Min	Max				
Giardia Cyst	0	0	N/A	Microbial Pathogens found in all untreated water. Chlorination will inactivate Giardia		
Giardia, Cyst/L	0	0	0 - 0.4	Surface Water Causes Giardiasis		
Cryptosporidium, Oocysts/L	N/A		0 - 0.1	Microbial Pathogens found in surface water.		

Synthetic Organic Compounds (SOC)		Asbestos	
Waiver granted till 12/31/2019		To be sampled before 12/31/2019	
Haloacetic Acids(ppb)	Min	Max	LRAA Federal/State MCL 60ppb (red=violation)
Site 1	48	87.5	Quarter 172, Quarter 2-67
Site 2	47.5	83.6	Quarter 1-84, Quarter 2-81
Site 3	45.1	87.6	Quarter 1-89, Quarter 2-80
Site 4	42	87	Quarter 1-63
Site 5	1.3	80.9	Quarter 1-84, Quarter 2-74
Site 6	1.23	47.2	17
Site 7	35	48	Quarter 1-70
Site 8	0	45.4	31
Site 9	31.7	78.2	Quarter 1-93, Quarter 2-82
Site 10	44.4	83.1	Quarter 1-86, Quarter 2-79
Site 11	39.4	80.8	Quarter 1-91, Quarter 2-79
Site 12	45.2	85.4	Quarter 1-92, Quarter 2-84
NJDWSC Annual (August 2019) OTP – 21 Admin Building – 33			
By Product of Drinking Water Chlorination			

Stage 2 Trihalomethanes (ppb)	Min	Max	LRAA - Federal/State MCL 80ppb (red =violation)
Site 1	43.6	83.4	56.0
Site 2	43.9	87.6	58.0
Site 3	43.8	94.8	62.0
Site 4	37.9	105	63.0
Site 5	0	93	Quarter 1-82
Site 6	45	72.8	58.0
Site 7	39.7	76.5	52.0
Site 8	37.2	73.0	54.0
Site 9	44.2	119	Quarter 1-88, Quarter 2-93
Site 10	34.2	95.9	58.0
Site 11	42.6	92.7	60.0
Site 12	42.3	86.9	Quarter 1-81
NJDWSC Annual (August 2019) OTP – 35, Admin Building – 55			

## UCMR:

The City of Newark participated in the Unregulated Contaminant Monitoring Rule. Unregulated contaminants are those for which the EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist the EPA and NJDEP in determining the occurrence of unregulated contaminants in drinking water and whether regulation is warranted. Our results are available upon request. For testing conducted within our service area, the following substances were found:

Unregulated Contaminant Monitoring Rule (UCMR-4) 2019					
Metals Assessment Monitoring					
Contaminant	Units	MRL	Average Level Detected	Range Detected	Typical Source
Manganese	ppb	0.4	2.4	2.0-2.7	Erosion of natural deposits
Germanium	ppb	<0.30	ND	ND	
Haloacetic Acid (HAA) Group Assessment Monitoring					
HAABr Group					
Contaminant	Units	MRL	Average Level Detected	Range Detected	Typical Source
Bromochloroacetic Acid	ppb	NA	1.7	.89 - 2.7	Byproduct of drinking water disinfection
Bromodibronoacetic Acid	ppb	NA	2.1	1.6 - 3.4	Byproduct of drinking water disinfection
Chlorodibromoacetic Acid	ppb	NA	ND	ND	Byproduct of drinking water disinfection
Dibromoacetic Acid	ppb	NA	ND	ND	Byproduct of drinking water disinfection
Dichloroacetic Acid	ppb	NA	30.1	1.2 – 51.5	Byproduct of drinking water disinfection
Monobromoacetic Acid	ppb	NA	ND	ND	Byproduct of drinking water disinfection
Monochloroacetic Acid	ppb	NA	3.2	4.1 – 6.0	Byproduct of drinking water disinfection
Tribromoacetic Acid	ppb	NA	ND	ND	Byproduct of drinking water disinfection
Trichloroacetic Acid	ppb	NA	58.8	2.5 – 93.3	Byproduct of drinking water disinfection
Semi-volatiles Group Assessment Monitoring					
Contaminant	Units	MRL	Average Level Detected	Range Detected	Typical Source
Butylated Hydroxyanisole	pob	NA	ND	ND	
Bromodibronoacetic Acid	ppb	NA	ND	ND	
Chlorodibromoacetic Acid	ppb	NA	NA	ND	

Alcohols Group Assessment Monitoring					
Contaminant	Units	MRL	Average Level Detected	Range Detected	Typical Source
n-Butanol	pob	NA	ND	ND	
2-Methoxyethanol	ppb	NA	ND	ND	
2-Orioeb-1-ol	ppb	NA	ND	ND	

Unregulated Contaminant Monitoring Rule (UCMR-3) 2015					
Metals Assessment Monitoring					
Contaminant	Units	Average Level Detected	Range Detected		Typical Source
Chromium	ppb	0.2	ND -. 0.4		see chromium-6 for use or source information; though the amount measured when analyzing for "total chromium" is the sum of chromium in all of its valence states, the MCL for EPA's current total chromium regulation was determined based upon the health effects of chromium
Chromium Hexavalent  (chromium 6)	ppb	0.55	0.54 – 0.56		Naturally-occurring element; used in making steel and other alloys; chromium -3 or -6 forms are used for chrome plating, dyes and pigments, leather tanning, and wood preservation
Strontium	ppb	38.2	31.3 – 45.1		Naturally occurring element; historically commercial use of strontium has been in the faceplate glass of cathode-ray tube televisions to block x-ray emissions
Chlorate	ppb	14	ND - 28		Agricultural defoliant or desiccant; disinfection byproduct; and used in production of chlorine dioxide

## KEY TERMS & ACRONYMS

**Action Level (AL):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirement that a water system must follow.

**Treatment Technique (TT):** A required process intended to reduce the level of a contaminant in drinking water.

**CU:** Color Units.

**EPA:** United States Environmental Protection Agency

**Inorganic Contaminants:** Contaminants such as salts and metals, which can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming. These contaminants may be present in source water.

**LRAA:** Locational running annual average

**Maximum Contaminant Level (MCL):** The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to MCLG's as feasible using the best available technology.

**Maximum Contaminant Level Goal (MCLG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

**Maximum Residual Disinfectant Level (MRDL):** The highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

**Maximum Residual Disinfectant Level Goal (MRDLG):** The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contamination.

**mfl:** Million fibers per liter.

**mrem/year:** Millirems per year, a measure of radiation absorbed by the body.

**ND:** Not detectable at testing limit.

**NS:** No standard.

**ntu:** Nephelometric Turbidity Units.

**picoCurie (pCi):** A unit used to describe the level of activity or decay of a radioactive element.

**pCi/l:** PicoCuries per liter (a measure of radioactivity).

**ppb (parts per billion):** 1 drop in 10,000 gallons, 1 inch in 16,000 miles, or one penny in \$10,000,000.

**ppm (parts per million):** 1 drop in 10 gallons, 1 inch in 16 miles, or one penny in \$10,000.

**ppq:** Parts per quadrillion, or picograms per liter.

**ppt:** Parts per trillion, or nanograms per liter.

**RUL:** Recommended Upper Limit.

**Secondary Contaminants:** Federal drinking water measurements for substances that are not health related. These are recommended levels and reflect aesthetic qualities of water.

**SMCL:** Secondary Maximum Contaminant Level.

**Treatment Technique (TT):** A required process intended to reduce the level of a contaminant in drinking water.

**TON:** Threshold Odor Number.

ADDITIONAL RESOURCES	
Newark Water & Sewer website: <a href="https://waterandsewer.newarknj.gov/">https://waterandsewer.newarknj.gov/</a>	Newark Water & Sewer: 973-733-6303
EPA Drinking Water website: <a href="http://www.epa.gov/safewater">www.epa.gov/safewater</a>	EPA Safe Drinking Water Hotline: 800-426-4791
NJDEP Water Supply website: <a href="http://www.nj.gov/dep/watersupply">www.nj.gov/dep/watersupply</a>	NJDEP Bureau of Safe Drinking Water: 609-292-5550
American Water Works Association (AWWA) website: <a href="http://www.awwa.org">www.awwa.org</a>	AWWA New Jersey website: <a href="http://www.njawwa.org">www.njawwa.org</a>



# NEWARK CITY COUNCIL

The public is invited to attend city council meetings to participate in decisions that affect drinking water quality.

## 2020 CALENDAR

*Conferences and Meetings of  
The Newark Municipal Council*

**RAS J. BARAKA**  
Mayor

### MUNICIPAL COUNCIL

**MILDRED C. CRUMP**

*Council President/Council Member-at-Large*

**AUGUSTO AMADOR**  
*Council Member, East Ward*

**LAMONICA R. McIVER**  
*Council Member, Central Ward*

**CARLOS M. GONZALEZ**  
*Council Member-at-Large*

**EDDIE OSBORNE**  
*Council Member-at-Large*

**JOHN SHARPE JAMES**  
*Council Member, South Ward*

**LUIS A. QUINTANA**  
*Vice President  
Council Member-at-Large*

**JOSEPH A. McCALLUM, JR.**  
*Council Member, West Ward*

**ANIBAL RAMOS, JR.**  
*Council Member, North Ward*



### Important Dates

Jan.	1	New Year's Day
Jan.	20	Dr. Martin Luther King Jr.'s Birthday
Feb.	12	Lincoln's Birthday
Feb.	17	Washington's Birthday (Observed)
Apr.	10	Good Friday
May	25	Memorial Day
June	2	Primary Election
July	3	Independence Day (Observed)
Sept.	7	Labor Day
Oct.	12	Columbus Day (Observed)
Nov.	3	Election Day
Nov.	11	Veterans' Day
Nov.	17-20	State League Conference
Nov.	18-21	National League Conference
Nov.	26-27	Thanksgiving
Dec.	25	Christmas Day

★ ★ ★ ★ ★

...	PRE-MEETING CONFERENCE
...	REGULAR MEETING
...	SPECIAL MEETING/CONFERENCE
...	MUNICIPAL HOLIDAY
...	OTHER IMPORTANT DATES

All meetings of the Municipal Council are held in the Council Chamber, Second Floor, City Hall, 920 Broad Street. The first regular meeting of each month is held at 12:30 P.M. followed by a Hearing of Citizens. The second regular meeting of each month is held at 6:30 P.M. preceded by a Hearing of Citizens. Pre-meetings, special meetings and conference meetings begin at 10:00 A.M., followed by a thirty (30) minute public speaking session. Action will be taken at all meetings.

**Kenneth Louis**  
City Clerk

**Kathleen Marchetti**  
Deputy City Clerk

920 Broad Street  
Newark, New Jersey 07102  
(973) 733-6363

PRSRT. STD.  
US POSTAGE PAID  
NEWARK, NJ  
PERMIT NO. 937

**Department of Water and Sewer  
Utilities**

**Newark City Hall Room B-31F**

**920 Broad Street**

**Newark, New Jersey 07102**



**Ras J. Baraka**  
Mayor

### Municipal Council

**Mildred C Crump**

*Council President, Council Member-At-Large*

**Augusto Amador**  
*Council Member, East Ward*

**LaMonica R. McIver**  
*Council Member, Central Ward*

**Carlos M. Gonzalez**  
*Council Member-At-Large*

**Eddie Osborne**  
*Council Member-At-Large*

**John Sharpe James**  
*Council Member, South Ward*

**Luis A. Quintana**  
*Council Member-At-Large*

**Joseph A. McCallum, Jr.**  
*Council Member, West Ward*

**Anibal Ramos, Jr.**  
*Council Member, North Ward*

**Business Administrator**  
Eric Pennington

**Department of Water and Sewer  
Utilities**  
Kareem Adeem, Director

Resolution 7R8-a, December 4, 2019.  
This calendar was issued in December, 2019.  
Its source of funding is the municipal budget for the Office of the City Clerk.

JANUARY							FEBRUARY							MARCH						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
														1	2	3	4	5	6	7
5	6	7	8	9	10	11	2	3	4	5	6	7	8	8	9	10	11	12	13	14
12	13	14	15	16	17	18	9	10	11	12	13	14	15	15	16	17	18	19	20	21
19	20	21	22	23	24	25	16	17	18	19	20	21	22	22	23	24	25	26	27	28
26	27	28	29	30	31		23	24	25	26	27	28	29	29	30	31				
APRIL							MAY							JUNE						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
														1	2	3	4	5	6	7
5	6	7	8	9	10	11	3	4	5	6	7	8	9	7	8	9	10	11	12	13
12	13	14	15	16	17	18	10	11	12	13	14	15	16	14	15	16	17	18	19	20
19	20	21	22	23	24	25	17	18	19	20	21	22	23	21	22	23	24	25	26	27
26	27	28	29	30			24	25	26	27	28	29	30	28	29	30				
JULY							AUGUST							SEPTEMBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
														1	2	3	4	5	6	7
5	6	7	8	9	10	11	2	3	4	5	6	7	8	6	7	8	9	10	11	12
12	13	14	15	16	17	18	9	10	11	12	13	14	15	13	14	15	16	17	18	19
19	20	21	22	23	24	25	16	17	18	19	20	21	22	20	21	22	23	24	25	26
26	27	28	29	30	31		23	24	25	26	27	28	29	27	28	29	30			
OCTOBER							NOVEMBER							DECEMBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
														1	2	3	4	5	6	7
4	5	6	7	8	9	10	8	9	10	11	12	13	14	6	7	8	9	10	11	12
11	12	13	14	15	16	17	15	16	17	18	19	20	21	13	14	15	16	17	18	19
18	19	20	21	22	23	24	22	23	24	25	26	27	28	20	21	22	23	24	25	26
25	26	27	28	29	30	31	29	30						27	28	29	30	31		